

Face Sketch Construction and Recognition

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Abstract: *In today's world, where crime rates are escalating at an alarming pace, law enforcement agencies are under immense pressure to identify suspects swiftly and accurately. Traditional methods, such as relying on skilled forensic artists to create hand-drawn suspect sketches, often face challenges like subjective interpretation, time consumption, and limited accuracy. To address these issues, this paper introduces a cutting-edge solution that combines advancements in facial recognition technology with a user-friendly design approach.*

The proposed tool allows users to create precise and detailed facial representations through an intuitive drag-and-drop interface. This eliminates the dependence on expert artists, empowering officers and non-specialists alike to generate high-quality facial sketches. These digital drawings can be seamlessly matched against vast police databases using advanced deep learning algorithms and cloud-based systems, ensuring both speed and scalability.

By integrating modern technologies into the suspect identification process, this tool offers several key advantages. It reduces the time taken to generate and analyze suspect images, enhances the accuracy of matches, and simplifies the overall workflow for investigators. Beyond these technical benefits, it equips law enforcement personnel with a powerful and efficient resource that not only accelerates their efforts but also increases the overall effectiveness and responsiveness of investigations. With this innovation, we aim to transform the way crime detection is approached, paving the way for faster justice and safer communities.

Keywords: facial recognition, drag-and-drop interface, suspect identification, deep learning algorithms, cloud-based technology, forensic artist replacement, law enforcement efficiency, modern crime detection

